

UNITED STATES OF AMERICA  
POSTAL REGULATORY COMMISSION  
WASHINGTON, DC 20268-0001

Periodic Reporting  
(Proposal One)

Docket No. RM2016-7

PUBLIC REPRESENTATIVE COMMENTS ON  
PROPOSED CHANGES IN ANALYTICAL  
PRINCIPLES USED IN PERIODIC REPORTING  
(PROPOSAL ONE)

May 20, 2016

The Public Representative hereby provides comments in response to Commission Order No. 3225.<sup>1</sup> In that Order, the Commission established the above referenced docket to receive comments from interested persons, including the undersigned Public Representative, on a Postal Service Petition requesting that the Commission initiate a rulemaking proceeding to consider a proposal to change the approved analytical methods used in the Postal Service's periodic reports to the Commission.<sup>2</sup>

To clarify the Postal Service's Petition, the Chairman issued two information requests.<sup>3</sup> The Postal Service responded to the information requests on April 25, 2016 and May 11, 2016.<sup>4</sup>

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<sup>1</sup> Order No. 3225, Notice of Proposed Rulemaking on Analytical Principles Used in Periodic Reporting (Order), April 8, 2016.

<sup>2</sup> Petition of the United States Postal Service Requesting Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposal One), April 5, 2016 (Petition).

<sup>3</sup> Chairman's Information Request No. 1, April 14, 2016 (CHIR No. 1); *and* Chairman's Information Request No. 2, April 29, 2016 (CHIR No. 2)

<sup>4</sup> Responses of the United States Postal Service to Questions 1-6 of Chairman's Information Request No. 1, April 25, 2016 (Response to CHIR No. 1); *and* Responses of the United States Postal Service to Questions 1-3 of Chairman's Information Request No. 2, May 11, 2016 (Response to CHIR No. 2).

In Proposal One, the Postal Service seeks to replace the estimation method used for a portion of the current sampling system, System for International Revenue and Volume, Outbound—International Origin-Destination Information System (SIRVO- IODIS). The SIRVO-IODIS is the name of the Postal Service probability sample system for outbound international mail that collects mail characteristics and volume flow information where census data is not available and apportions census data by country.<sup>5</sup> The Postal Service uses this data as one of the sources to develop estimates of revenue, pieces and weight of international mail by class, subclass, category, and extra service, and for service performance measurements. *Id.*

## COMMENTS

For the reasons stated below, the Public Representative recommends that the Commission approve Proposal One.

The Postal Service filed as an attachment to the Petition, details of the redesigned system wherein it specifies the process resulting in the reporting of the revenue, pieces and weight in the Revenue Pieces and Weight (RPW) report. The process begins with obtaining data on the international mail piece from various postal systems. Data not available from the various postal systems on the international mail piece is obtained using the statistical sampling system – mainly SIRVO-IODIS. SIRVO- IODIS product revenue, pieces and weight estimates include First-Class Mail International (FCMI), First-Class Package International Service (FCPIS), and PMI products.

The Postal Service seeks in Proposal One to replace the portion of the estimate for revenue and pieces for certain outbound international products, obtained from probability sampling, with a model based regression estimator. It states that the model based regression estimator is the best linear unbiased predictor, and when combined

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<sup>5</sup> Statistical Programs Management Guide, Handbook F-95 June 2005, Section 1.1, Page 6.

with a robust variance estimator, negates potential bias in the variance estimates caused by model misspecifications.<sup>6</sup> It further adds that in cases when sample data for SIRVO-IODIS is not available, homogenous proxy data from an earlier time period will be used and the criteria will continue to be widened until usable sample data is obtained.

The Public Representative agrees that the accuracy of revenue, pieces and weight for certain outbound international products should improve with the introduction of a model based regression estimator and the greater use of census data. However, there are a few issues worth considering in the evaluation of the proposal.

The Public Representative is cautious of the Postal Service's use of ever widening proxy data. The improvements in margin of error<sup>7</sup> may worsen if the proxy sample data used in the following year is not as good as estimated in Proposal One. Furthermore, the use of proxy data introduces additional errors. The Commission should consider whether the likely magnitude of this error has been accounted for in the margin of error estimates provided by the Postal Service.

The Postal Service explains that changes in the revenue and pieces in the products as a result of this proposal is due to the shift in weight distributions among the products caused by the lower level expansion process and granular census adjustments.<sup>8</sup> To achieve this, SIRVO-IODIS has to be modified to match data from another automated system Global Business System (GBS)<sup>9</sup> and other census data used for counting international mail revenue, pieces, and volume. It is worth noting that

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<sup>6</sup> Petition at 6.

<sup>7</sup> *Id.* at 10; Response to CHIR No. 1, Question 3; Response to CHIR No. 2, Question 1.b.

<sup>8</sup> Petition at 9.

<sup>9</sup> Global Business System (GBS) is a Postal Service dispatch and receipt system monitoring all mail leaving and entering the United States. The international postal operation dispatch system called Global Business System (GBS) Dispatch provides various census data, including weight data by country, origin International Service Center (ISC) and transportation mode for IPA and ISAL, as well as weight and piece data for products such as Airmail M-Mags dispatched in separate containers.

the more modification made to SIRVO-IODIS, the increased chance for error and mismeasurement.

The Postal Service states that data from automated systems such as Point of Sales (POS) replacing manual data from SIRVO-IODIS will still comprise of a sample of locations, incorporating all pieces in the sample instead of every  $n^{\text{th}}$  piece. The Public Representative notes that this will likely improve the margin of error and reduce the bias from using a ratio estimator, given that the weights used to expand from sample values to international total values are based on both a sample of location and a sample of pieces. However, it appears that the Postal Service may be trading one type of error for another; sample of volume per site error for regression error. It is also unclear whether the new margin of error is possibly a combination of the regression error and the error associated with selecting sample sites (not all sites).

The Public Representative respectfully submits the foregoing comments for the Commission's consideration.

Respectfully submitted,

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